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### **Income Distributional Implications of Unemployment Insurance and Social Assistance** in the 1990's: A Micro-Simulation Approa

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#### **Purpose**

This brief summarizes the authors' appraisal of the appropriate role of unemployment insurance in the social security framework. In conducting this evaluation, three themes were pursued. The first examined the links among UI, unemployment, poverty, and social assistance. The second examined the povertyalleviation performance of the Canadian UI system compared with that of the US and certain European countries. Finally, the question of whether people have sufficient assets to sustain basic living standards through a spell of unemployment was addressed.

The study is one of a series of component studies which evaluate the UI Regular Benefits Program. Collectively, they address twelve evaluation issues relating to UI program rationale, program impacts and effects, objectives achievement and alternatives.

#### Background

Studies of the 'new poverty' in Europe indicate that there has been a change in the composition of the poor in Europe – a major reason for this change being the increase in the proportion of the poor who are unemployed or in poorly-paid or insecure jobs. Given the growth of nonstandard employment in Canada, it is possible that the changes observed in Europe have also occurred in Canada. Certainly, unemployment will deepen the poverty of the 'working poor' even if earnings are UI covered, 55 percent of minimum-wage earnings would place almost any household below the poverty threshold.

Moreover, with an increasing number of parttime and temporary jobs not covered by UI, it is possible that an increasing fraction of the unemployed are poor because they are not entitled to unemployment insurance. Thus, while UI has not traditionally been viewed as an anti-poverty policy, it is appropriate to reevaluate the relationship between UI, poverty and the income security framework.

In this context, the evaluation explores the relationship between UI and social assistance, the poverty-alleviation performance of Canadian UI relative to that of other countries, and the adequacy of individual assets in covering an unemployment spell. The data available to study these issues derive from different sources and consequently the methodology varies from topic to topic.

#### **UI - Social Assistance Links**

To study the links between UI and social assistance, the authors built a new behavioural microsimulation model of the Canadian economy for the 1990's. Two developments in the model were of particular value. The first was the addition of a demographic module. Demographic characteristics such as age, marital status and number of children play an important role in determining labour market behaviours and outcomes (e.g., participation and unemployment). Earlier versions of the microsimulation model held these characteristics fixed over time. However, for any individual, it is reasonable to assume that over the eleven-year simulation period (1994-2004) many characteristics will change.





A complete model should therefore take account of **interactions** between demography and labour-market outcomes and consequently the demographic module was added. Since both eligibility for social assistance and poverty experience are affected by family characteristics (e.g., number of children, income of spouse), taking account of demography was particularly important for this study.

The second significant addition to the microsimulation model was that of a social assistance module. Since in reality social assistance is a programme of last resort, social assistance claims were modelled residually. That is, the simulation model assigns individuals social assistance for weeks in which they have no employment or UI income, but only if total annual household income is less than \$10,000 and provided they are not students or in receipt of pension income. Thus, what is being captured is potential eligibility for social assistance. In practice, the "take up rate" of social assistance is less than 100% since some eligible individuals do not actually establish claims.

The authors simulated the consequences of two potential changes to the 1994 Canadian UI system: 1) the addition of 5 weeks to the minimum necessary to establish a UI claim; 2) the extension of UI coverage to weeks of self-employment and weeks with short hours of work.

The results indicate that the percentage of the unemployed who receive UI changes markedly as the programme is modified. With the 1994 UI system, about 35 percent of those with some unemployment during the year were ineligible for benefits in 1994. This increases to 38 percent if minimum weeks of work to establish eligibility are increased by 5 and falls to about 24 percent with the extension of coverage to "non-standard" employment.

Relative to the 1994 system, adding 5 weeks to eligibility requirements reduces the number of

UI claimants by about 6 percent, with a 16 percent decline in dollars paid out. In consequence, both social assistance claims and total dollars of social assistance increase by about 10 percent. Tightening eligibility conditions would simply shift income maintenance expenditures from the UI to the social assistance systems.

In the first year of the simulation, extending UI coverage to self-employment and weeks with short hours increases the number of UI claimants and total UI expenditures by about 16.5 percent, relative to the existing system. About 83 percent of the increase in expenditures is due to the new coverage of self-employed workers; while only 3.5 percent is due to coverage of workers with low hours and/or low wages. This occurs since the newly-covered self-employed dominate in terms of numbers and since workers with low hours and/or low wages would only be eligible for rather small UI payments.

While UI expenditures increase by 16.5 percent in the first year of the simulated extension of UI benefits to non-standard employment, social assistance expenditures remain basically unchanged. The explanation lies in the fact that the majority of the newly covered unemployed (83 percent) are self-employed. In most cases, these individuals had high annual incomes or pension incomes which disqualifed them from collecting social assistance in the first place. Their new receipt of UI would have no impact on SA expenditures. Newly covered individuals with short hours or low wages are small in number and their impact on aggregate statistics is corrrespondingly small. Nevertheless, despite their having own incomes low enough to qualify for SA, the majority, being female or a student, live in households with incomes above the model's \$10,000 cutoff, thereby rendering them ineligible for SA.

Tightening eligibility conditions for UI by 5 weeks increases the overall incidence of poverty by about 5 percent in 1994, but there is

little change in the average depth of poverty. By contrast, although extending UI benefits to nonstandard employment would benefit some poor individuals (some workers with low hours/wages), since the number of such people is very small relative to the total population, this policy change has little effect on the aggregate level of poverty.

#### **International Comparisons**

The 1980's version of the microsimulation model was used to evaluate the impact of adopting a US-style UI system on the level and distribution of income in Canada. Since UI programmes differ across US states, the New York and Texas systems, examples of high benefit/high premium and low benefit/low premium states, respectively, were chosen for study. The results indicate that aggregate inequality would increase and average incomes would fall in Canada if either US-style system were adopted. It is not surprising that income inequality would go up with a less generous UI system. The poor lose most from such a policy change, in large part because relatively few individuals in the richest income quintile are touched by changes in UI.

The study also evaluated the povertyalleviation role of Canadian UI relative to the UI systems of a wider set of affluent industrialized countries (Australia, Finland, Germany, Sweden and the US) using microdata from the Luxembourg Income Study. The evidence clearly indicates that while poverty alleviation is not usually regarded as the most important goal of UI in Canada, UI nonetheless plays an extremely important role in reducing poverty associated with unemployment. UI benefits are received by a larger fraction of the unemployed in Canada than in any of the other countries studied. This is very important in reducing poverty since households with unemployment who do not receive UI experience extremely high rates of poverty (43 percent in Canada).

Perhaps the most important point the researchers take from this survey is that UI as a poverty-alleviation tool appears to be much more important in Canada than in the other countries studied. For families receiving UI in Canada, UI is the most important transfer they receive. This is true for no other country except Germany. Elsewhere, families receiving UI receive more in the form of other transfers. If UI were to be cut in these countries, families would have more in the way of back-up income support than would be true in Canada.

## Adequacy of Individual Liquid Assets

Microdata from the 1983/84 Statistics Canada Survey of Assets and Debts was used to analyze the adequacy of individual liquid assets in covering a spell of unemployment. Overall, the liquid asset holdings of Canadian households – particularly of those households that experience unemployment – is rarely sufficient to finance an average duration unemployment spell, at a poverty line level of living. For men (aged 16 to 65), 68 percent do not have sufficient liquid assets to survive a spell of unemployment of average length at a poverty level standard of living. If home equity is added to net liquid assets (assuming a maximum second mortagage on the home), 36 percent of men would not be able to survive a spell of unemployment without other income support. Results for women are similar. Young people (under 25 years) are even more vulnerable - in part because they have not had the time to save a sufficiently large stock of assets. The current level and distribution of household assets certainly means that Canadian households would face a significant problem of adjustment if UI were no longer available, or only available in significantly diminished amount, to finance consumption during periods of unemployment.

#### **Biographical Notes**

Lars Osberg is a Professor of Economics at Dalhousie University and a Director of the Canadian Employment Research Forum. He is an acknowledged authority in labour economics, macroeconomics, applied econometrics, as well as economic and social policy. He has published extensively on unemployment, UI, labour mobility, earnings and wealth distribution, and measurement of economic well-being, among other subjects. His books on economic inequality make him one of the best known experts on issues related to income distribution and redistribution.

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